APPENDIX D
WATER REGULATIONS

Federal Water Pollution Control Act

The Federal Water Pollution Control Act (FWPCA) (33 U.S.C. 1251 et seq., as amended) establishes Federal water quality policies, goals, and programs. (Note: in 1977, the FWPCA was renamed the Clean Water Act [CWA]) Both the Environmental Protection Agency and States have the responsibility for carrying out the CWA. The sections pertinent to the Logan Creek analysis area are:

1. Objective/Goals/Policy (Section 101) of the CWA is to "**restore and maintain the chemical, physical, and biological integrity of the Nation's waters**."

2. Water Quality Standards (Section 303(c)). States are required to establish water quality standards that allow for protection of the beneficial uses made of the water. State water quality standards consist of: 1) **designated beneficial uses** of the waters involved; and 2) **water quality criteria** (either numeric or narrative) sufficient to protect the designated beneficial uses. Standards are established taking into consideration the use of the water body, and its value for public water supplies, propagation of fish and wildlife, recreational, agricultural, industrial, and other purposes. The standards are the legal basis for control decisions under the Act.

The State of Montana has classified all the streams in the Logan Creek analysis area as B-1. Specific changes from naturally occurring values of certain water quality characteristics, such as turbidity and temperature, are allowed under State water quality standards. Growth and propagation of a salmonid fishery and associated aquatic life are the beneficial uses identified by the State of Montana for these streams.

3. Water Quality Limited Segments (Section 303(d)). States are required to identify waters within their boundaries for which the effluent limitations are not stringent enough to implement any water quality standard applicable to such waters. States are to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. States are to also establish Total Maximum Daily Loads (TMDL's) for those pollutants causing the water quality standards not to be met. Logan Creek above Tally Lake was placed on the Montana 303(d) list for impairments related to siltation and suspended solids. Logan Creek was subsequently removed from the 303(d) list pending further analysis of its water quality status, and is currently listed on Appendix F of the 2002 303(d) list as a water body requiring further assessment. However, a 2000 court ruling in a law suit requires the Montana Department of Environmental Quality (DEQ) to prepare TMDL plans or provide sufficient credible data that the stream is not impaired for all streams on the 1996 list by the year 2007.

Antidegradation Policy

Although not a requirement of the Clean Water Act, the EPA developed regulations in 1975 requiring states to adopt an antidegradation policy as a part of a state's water quality standard. States were also directed to spell out how they would implement the policy. 40 CFR 131.12 states, "The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing in stream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the inter-governmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important

economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirement for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(3) Where high-quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected."

Montana Water Quality Standards

1. **Montana Surface Water Quality Standards**. The Administrative Rules of Montana (ARM), Title 16, Chapter 20, Sub-Chapter 6, Surface Water Quality Standards establish water-use classifications for river drainages within the State based upon "present and future most beneficial uses." For each water-use classification, surface water quality standards of performance are assigned to protect the designated beneficial water uses. For all water-use classifications standards for bacteria, dissolved oxygen, pH, and toxic substances (i.e., herbicides) are defined by specific limits. Standards for sediment, turbidity, water temperature, and color are described in terms of "naturally occurring." See previous discussion for beneficial uses of the streams that flow through the Logan Creek analysis area.

Section 75-5-306 of the Montana Water Pollution Control Law (MCA) and the ARM 16.20.603(17) define "naturally occurring" as "conditions or material present from runoff or percolation over which man has no control or from developed land where all reasonable land, soil, and water conservation practices have been applied. Conditions resulting from the reasonable operation of dams at July 1, 1971, are natural."

The ARM 16.20.603(21) defines "Reasonable land, soil, and water conservation practices" as "methods, measures, or practices that protect present and reasonably anticipated beneficial uses. These practices include, but are not limited to, structural and non-structural controls and operation and maintenance procedures. Appropriate practices may be applied before, during, or after pollution producing activities." These practices include Best Management Practices, but they are only considered "reasonable" if beneficial uses are protected.

For the Logan Creek analysis area, the Forest has applied the following process to insure compliance with the State water quality standards:

1. Best Management Practices (BMPs) were selected and designed by an interdisciplinary team (IDT) based on site-specific conditions, technical, economic and institutional feasibility, and designated beneficial uses of the stream (see above)

2. BMPs were translated into required activities through the timber sale contract; they become legal requirements as "BT" and "CT" contract clauses.

3. BMP implementation would be monitored by a certified sale administrator who would insure that they are being implemented, and that they are effective in protecting designated beneficial uses.

4. The results of BMP monitoring would be evaluated by the IDT and other forest specialists.

5. The results of BMP monitoring and evaluation would fed back into other activities. BMPs and other design criteria would be redesigned if it were determined that they are not fully effective.

Montana Nondegradation Policy

MCA 75-5-303 states that (1) Existing uses of state waters and the level of water quality necessary to protect those uses must be maintained and protected; (2) Unless authorized by the department under subsection (3), the quality of high-quality waters must be maintained; (3) the department may not authorize degradation of high-quality waters unless it has been affirmatively demonstrated by a preponderance of evidence to the department that (a) degradation is necessary because there are no economically, environmentally, and technologically feasible alternatives to the proposed project that would result in no degradation, (b) the proposed project will result in important economic or social development that exceeds the benefit to society of maintaining existing high-quality waters and exceeds the costs to society of allowing degradation of high-quality waters, (c) existing and anticipated use of state waters will be fully protected, and (d) the least degrading water quality protection practices determined by the department to be economically, environmentally, and technologically feasible will be fully implemented by the applicant prior to and during the proposed activity.

ARM 16.20.708 states that (a) The water quality necessary to protect existing and anticipated uses must be maintained and protected on all state waters, and (b) For high-quality waters, degradation may be allowed only according to the procedure in ARM 16.20.711. These rules apply to any activity that may cause degradation of high-quality waters, for any parameter, unless the changes in existing water quality resulting from the activity are determined to be nonsignificant under ARM 16.20.712 or 16.20.713.

> **Degradation** is defined in the 75-5-103 as: "a change in water quality that lowers the quality of high-quality waters for a parameter. The term does not include those changes in water quality determined to be non-significant pursuant to 75-5-301(5)(c)."
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> **High-quality Water** is defined as: "state waters whose quality for a parameter is better than standards established pursuant to 75-5-301. All waters are high-quality..." (Only Class I waters are not high quality).

The ARM 16.20, Subchapter 7, Nondegradation of Water Quality provides the criteria for determination of nonsignificance in ARM 16.20.713. Specifically, 16.20.713 lists:

> (a) activities which are nonpoint sources of pollution where reasonable land, soil, and water conservation practices are applied **and existing and anticipated beneficial uses will be fully protected**;
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> (c) changes in existing water quality resulting from an emergency or remedial activity that is designed to protect public health or the environment and is **approved, authorized, or required by the department**.

Streamside Management Zone Act

The STREAMSIDE MANAGEMENT ZONE ACT, House Bill 731, became effective October 1, 1991. This law prohibits seven forest practices in Streamside Management Zones (SMZs). These include:

1. Broadcast burning;

2. Operation of wheeled or tracked vehicles except on established roads;

3. The forest practice of clearcutting;

4. Construction of roads except when necessary to cross a stream or wetland;

5. Handling, storage, application, or disposal of hazardous or toxic material in a manner that pollutes streams, lakes, or wetlands, or that may cause damage or injury to humans, land, animals, or plants;

6. The side-casting of road material into a steam, wetland or watercourse;

7. The deposit of slash in streams or other water bodies.

A streamside management zone is a minimum of 50 feet wide on both sides of a stream and includes adjacent wetlands. The state of Montana defines a stream as "a natural watercourse of perceptible extent that has a generally sandy or rocky bottom or definite banks and that confines and conducts continuously or intermittently flowing water." Wetlands are defined as "Areas that remain wet long enough to support a prevalence of plants that need saturated soil conditions." Wetlands include marshes, swamps, bogs, and similar areas.

The seven forest practices prohibited within the SMZ may be permitted by the State with an "alternative practice." Approval for the activity must be obtained from the Department of State Lands before the practice begins. Alternative practices are site-specific and are only approved if the State determines that the integrity of the SMZ will be maintained.